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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,890	06/05/2007	Frank Duvinage	095309.57817US	8715

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EXAMINER
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TRAN, BINH Q

ART UNIT	PAPER NUMBER
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3748

MAIL DATE	DELIVERY MODE
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04/21/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,890	<b>Applicant(s)</b> DUVINAGE ET AL.	
	<b>Examiner</b> BINH Q. TRAN	<b>Art Unit</b> 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-25 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>06/06/2006</u> . | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

Receipt and entry of Applicant's Preliminary Amendment dated May 16, 2006 is acknowledged.

#### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the ***“storage tank, closure apparatus, components for level monitoring, warning signal etc...”*** in all of the claims, must be shown or the feature(s) canceled from the claim(s). The examiner suggests that applicants should submit a new drawing to show all the above elements. No new matter should be entered.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically,

In claims 10-13, the phrase ***“may be”*** is indefinite. The phrase has been held that the recitation that an element is ***“may be”*** performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

***Claims 9-25 are rejected under 35 U.S.C. 102 (b) as being anticipated by Liang et al. (Liang) (Patent Number 6,363,771).***

Regarding claims 9, 16, and 19-20, Liang discloses an exhaust gas purification system and method for a motor vehicle having a predetermined maintenance interval, comprising: a reducing agent storage tank (e.g. 12) for storing a reducing agent intended for exhaust gas purification, wherein the reducing agent storage tank is configured to have a capacity that is at least equal to a level predetermined by an assumed reducing agent consumption during the maintenance interval (e.g. See col. 3, lines 1-67).

Regarding claims 10, Liang further discloses wherein the reducing agent storage tank has a closure apparatus (e.g. 14, 20, 40) which **may be** opened for refilling purposes, the closure apparatus being configured to protect against being opened other than during a maintenance operation (e.g. See col. 3, lines 1-67).

Regarding claim 11, Liang further discloses wherein the reducing agent storage tank has a closure apparatus which may be opened for refilling purposes, the closure apparatus being configured to protect against being opened other than by authorized persons (e.g. See col. 3, lines 1-67).

Regarding claim 12, Liang further discloses wherein the reducing agent storage tank has a closure apparatus which may be opened for refilling purposes, the closure apparatus being configured to protect against being opened other than after the maintenance interval has elapsed (e.g. See col. 3, lines 1-67).

Regarding claim 13, Liang further discloses wherein said system is provided with components for level monitoring for the purpose of monitoring the quantity of reducing agent that is present in the reducing agent storage tank, so that a warning signal (e.g. 38, 42, 62) may be sent when the quantity of reducing agent drops below a determined residual quantity (e.g. See col. 3, lines 1-67).

Regarding claim 14, Liang further discloses wherein said residual quantity is determined based on an assumed consumption rate and the remaining running time until the end of the maintenance interval (e.g. See col. 3, lines 1-67).

Regarding claim 15, Liang further discloses wherein said residual quantity is determined based on a measured consumption rate and the remaining running time until the end of the maintenance interval (e.g. See col. 3, lines 1-67).

Regarding claim 17, Liang further discloses wherein the steps of unlocking a closure device for the reducing agent storage tank and refilling the reducing storage tank are conducted during a maintenance operation (e.g. See col. 3, lines 1-67).

Regarding claim 18, Liang further discloses wherein the steps of unlocking a closure device for the reducing agent storage tank and refilling the reducing storage tank are conducted after the end of the maintenance interval (e.g. See col. 3, lines 1-67).

Regarding claim 21, Liang further discloses the steps of: determining a consumption rate for the reducing agent, determining a reducing agent consumption quantity which is to be expected by the end of the maintenance interval, and sending a warning signal if the expected consumption quantity exceeds the quantity of reducing agent in the reducing agent storage tank (e.g. See col. 4, lines 1-67).

Regarding claim 22, Liang further discloses effecting intervention measures to reduce a consumption rate for the reducing agent after a predetermined motor vehicle running distance has been exceeded following a warning signal being sent (e.g. See col. 4, lines 1-67).

Regarding claim 23, Liang further discloses effecting intervention measures to reduce a consumption rate for the reducing agent after a predetermined motor vehicle running distance has been exceeded following a warning signal being sent (e.g. See col. 4, lines 1-67).

Regarding claim 24, Liang further discloses restricting the driving speed of the motor vehicle or the rotational speed of the motor vehicle drive engine is restricted after a

predetermined motor vehicle running distance has been exceeded following a warning signal being sent (e.g. See col. 4, lines 1-67).

Regarding claim 25, Liang further discloses restricting the driving speed of the motor vehicle or the rotational speed of the motor vehicle drive engine is restricted after a predetermined motor vehicle running distance has been exceeded following a warning signal being sent (e.g. See col. 4, lines 1-67).

### ***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of five patents:

Stiermann et al. (Pat. No. 7017336), Tarabulski et al. (Pat. No. 6063350), Murphy et al. (Pat. No. 5964089), Cramer et al. (Pat. No. 6876908), and Esteghlal et al. (Pat. No. 6260411) all discloses an exhaust gas purification for use with an internal combustion engine.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (571) 272-4865. The examiner can normally be reached on Monday-Friday from 8:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (571) 272-4859. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/BINH Q. TRAN/

Binh Q. Tran  
Primary Examiner, Art Unit 3748  
April 11, 2008